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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,926	06/23/2000	HORST WITTUR	11594-002001	6689

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EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 01/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/509,926

Applicant(s)

WITTUR, HORST

Examiner

Charles A. Fox

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4-6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Rompa. In regards to claim 1 Rompa (US 3,880,258) discloses an elevator, comprising:
a drive for moving an elevator cabin (1) running in a self supporting elevator shaft (6);
a counterweight (7) for moving in an upward and downward direction and being in effective communication with a bending flabby means guided over sheaves;
wherein the shaft is composed of:
segmented vertical girders (15) with segmented vertical guide elements (4) fixed thereto for guiding the elevator car and counterweight;
horizontal girders (18) formed by module-shaped frames connected to said segmented guide elements.

In regards to claim 4 Rompa also discloses that the mounting frames are made of squared sheets. See column 3 lines 19-24.

In regards to claim 5 Rompa further discloses that the vertical guide elements (4) are segmented, and engage at a working face with a male member (29) mating with a female member in a complimentary guide element.

In regards to claim 6 Rompa also discloses that the guide elements (4) are disposed in the area of the mounting frame (6), each respective mounting frame serving as the connecting elements for the guide segments.

In regards to claim 11 Rompa also discloses that the drive for the elevator is arranged within the shaft (6) of the elevator.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7,9,19-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rompa. Claims 7,9,19-21 and 23 all deal with the type of drive that provides motive power to the elevator. The specification at page 4 line 22 to page 5 line 3 makes all of the different claimed drive mechanisms equivalent with each other as well as "any other possible drive unit", therefore all of the claims are being treated as equivalent to each other and any other drive unit. In regards to the 102(b) rejection Rompa discloses a drive unit mounted at the top of the elevator shaft.

In regards to the 103(a) rejection, while Rompa does not disclose any of the drive mechanisms of claims 7,9, and 19-21 and 23, he does disclose a drive mechanism. It

would have been obvious to one of ordinary skill in the art, at the time of invention that the drive taught by Rompa would have been a member of the group of drives belonging to the group consisting of any other possible drive.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa as applied to claim 1 above, and further in view of Aulanko et al. Rompa teaches the limitations of claim 1 as above, he does not teach any location for the drive mechanism for the elevator. Aulanko et al. (US 5,429,211) teaches a drive mechanism (6) for an elevator that is mounted within the shaft way (15) and that the bending flabby means(3) is deflected by said driving mechanism (6). It would have been obvious to one of ordinary skill in the art, at the time of invention that the drive mechanism taught by Aulanko et al. could have been combined with the apparatus taught by Rompa in order to allow a space savings at the top of the shaft way by eliminating the need for a mechanical room to house the drive mechanism, therein making the system more economical to construct.

Claims 10,14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa as applied to claim 1 above, and further in view of Laughlin, Jr. Rompa teaches the limitations of claim 1 as above, he does not teach any particular location for the drive mechanism for the elevator. Laughlin Jr. (US 763,989) teaches an elevator assembly where the driving mechanism (a, a') are located outside of the elevator shafts, he further teaches they are located in a pit off to one side of the elevator shafts.

It would have been obvious to one of ordinary skill in the art, at the time of invention that the drive mechanism location taught by Laughlin, Jr. could have been

used with the apparatus taught by Rompa in order to allow for easier maintenance of the drive mechanism by placing it in a location that is accessible.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa as applied to claim 1 above, in view of Ericson and further in view of Garrido et al. Rompa teaches the limitations of claim 1 as above, he does not teach the apparatus as having a governor or a disc brake. Ericson (US 5,952,523) teaches an elevator system with a governor pulley (8) to limit the speed of the elevator car. He does not teach the governor as having a disc brake. It would have been obvious to one of ordinary skill in the art, at the time of invention to add a governor as taught by Ericson to the apparatus taught by Rompa in order to provide an emergency brake to the apparatus for stopping the car if it travels over a prescribed speed.

Garrido et al. teach a disc brake system (16) for stopping the rotation of a shaft (18) that is attached to the sheave of an elevator. It would have been obvious to one of ordinary skill in the art, at the time of invention that the disc brake taught by Garrido et al. could have been used with the system taught by Rompa and Ericson in order to have a braking system that is light in weight and utilizes a minimum of space, while providing for the stopping needs of the elevator.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa as applied to claim 1 above, and further in view of Anzai et al. Rompa teaches the limitations of claim 1 as above, he does not teach an emergency braking system for the elevator. Anzai et al. (4,023,655) teaches a braking system with arms (20) that would act as an emergency brake by engaging a wheel () if the axle (16) were to break.

It would have been obvious to one of ordinary skill in the art, at the time of invention that the braking system taught by Anzai et al. could act as an emergency brake on the system taught by Rompa in order to keep the elevator car from falling if a problem should arise.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa as applied to claim 1 above, and further in view of Muller et al. Rompa teaches the limitations of claim 1 as above, he does not teach the drive mechanism as being located on the elevator car. Muller et al. (US 5,636,712) teaches an elevator car (1) with a drive mechanism (23), where the drive mechanism (23) is mounted on the elevator car (1). It would have been obvious to one of ordinary skill in the art, at the time of invention that the drive mechanism taught by Muller et al. could have been used on the device taught by Rompa in order to maintain a constant contact pressure by the drive wheels to keep the drive wheels from slipping as they wear.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa as applied to claim 1 above, and further in view of Hakala. Rompa teaches the limitations of claim 1 as above, he does not teach the drive unit as being on the counterweight. Hakala (US 5,566,785) teaches a drive mechanism (6) for an elevator that is located in the counterweight (26) for the elevator. It would have been obvious to one of ordinary skill in the art, at the time of invention that the drive system as taught by Hakala could have been used with the system taught by Rompa in order to allow for a reduced size guide means in the shaft as well as decreasing the space needed to house the drive means for the elevator.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rompa and Aulanko et al. as applied to claim 2 above, and further in view of Pearson. Rompa and Aulanko et al. teach the limitations of claim 2 as above, they do not teach the drive belt as being flat. Pearson (1,164,115) teaches a flat drive belt (20) for an elevator. It would have been obvious to one of ordinary skill in the art, at the time of invention that the drive belt taught by Pearson could have been used in the device taught by Rompa and Aulanko et al. in order to have enhanced frictional contact with the driving sheave.

Response to Amendment

The substitute specification and amendments to the claims and abstract filed on October 10, 2002 have been entered into the record.

Response to Arguments

Applicant's arguments filed 10-28-02 have been fully considered but they are not persuasive. In regards to Rompa not teaching the vertical girders as providing the support for the elevator shaft, the limitations being argued are not in claim 1. Claim 1 only claims "vertical girders formed by segmental guide elements...", limitations that do not imply they are the only structural members of the shaft and these limitations are disclosed by Rompa. Therefore Rompa does disclose a self-supporting elevator shaft as claimed in claim 1.

In regards to the combination of Rompa and Laughlin in the rejections of claims 10, 14, and 15 as being drawn from non-analogous arts. Rompa teaches a self supporting elevator system and Laughlin teaches a drive mechanism for an elevator

system. Both references which are analogous to the instant invention of an elevator shaft and drive mechanism.

All other arguments against the rejected claims rest on the premise that none of the references teach a self-supporting shaft as claimed in claim 1. Rompa teaches such a shaft as pointed out above, as Rompa is the basis for all rejections the limitation of a self-supporting shaft is met in all rejections.

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is: Perkins 1981 and Richter et al. 2000.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

CAF
CAF

January 13, 2003



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600